

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
27 May 2004 (27.05.2004)

PCT

(10) International Publication Number  
WO 2004/044834 A1

(51) International Patent Classification<sup>7</sup>: G06K 19/077, H01L 23/498, 23/495

(74) Agent: WEBER, Helmut; Philips Intellectual Property & Standards, Triester Strasse 64, A-1101 Vienna (AT).

(21) International Application Number:  
PCT/IB2003/004913

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date: 31 October 2003 (31.10.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
02102557.2 12 November 2002 (12.11.2002) EP

(84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (for all designated States except US): KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventors; and

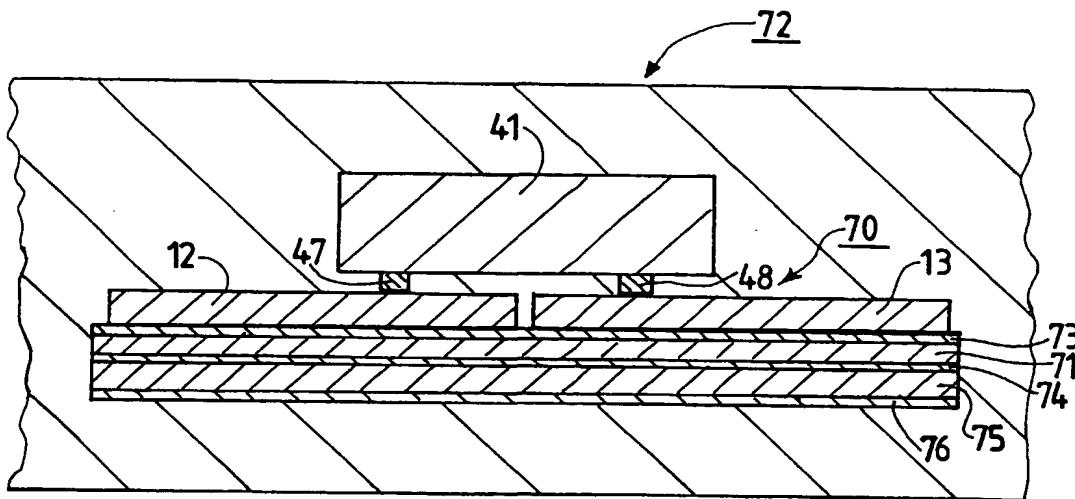
(75) Inventors/Applicants (for US only): FRITZ, Reinhard [AT/AT]; Triester Strasse 64, A-1101 Vienna (AT). SCHMALLEGGER, Peter [AT/AT]; Triester Strasse 64, A-1101 Vienna (AT). AKKAHADSI, Somnuk [AT/AT]; Triester Strasse 64, A-1101 Vienna (AT).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DATA CARRIER WITH A MODULE WITH A REINFORCEMENT STRIP



(57) Abstract: In a lead-frame configuration (60), a module (70) and a data carrier (72), two connecting plates (12, 13) of the module (70), which are each intended for connection to a connecting contact or bump (47, 48) of a chip (41), are connected to a reinforcement film (66, 71) formed from a fiber-reinforced film of plastics material by means of a layer (73) of an adhesive that is particularly well suited to transmitting shear forces, in which case there is additionally provided in an advantageous further embodiment, on the reinforcement film (66, 71), at least one further layer (74, 75, 76) that is able to serve for protecting, damping or fastening purposes.